



Facultad de Informática
Universidad Complutense de Madrid

ANUNCIO DE CONFERENCIA

Simulation-Based AI with LLMs for Game Agents

Prof. Simon Lucas

Queen Mary University of London

Facultad de Informática

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Entrada libre hasta completar el aforo

Resumen:

Despite amazing progress in generative AI, even the largest and smartest large language models have serious limitations in their reasoning abilities, as shown by results on game-playing benchmarks.

On the other hand, simulation-based AI (SBAI) agents make intelligent decisions based on the statistics of simulations using a forward model of a problem domain, providing a complementary type of intelligence. SBAI algorithms have very attractive properties, including instant adaptation to new problems, tunable intelligence and some degree of explainability.

In this talk I'll present recent results on combining SBAI with LLMs to develop capable game-playing agents, and argue that—right now—it's an especially good time to be an AI engineer.

Sobre Simon Lucas:

Simon Lucas is a full professor of AI in the School of Electronic Engineering and Computer Science at Queen Mary University of London where he leads the Game AI Research Group. He was previously Head of School of EECS at QMUL. He recently spent two years as a research scientist / software engineer in the Simulation-Based Testing team at Meta, applying simulation-based AI to automated testing.

Simon was the founding Editor-in-Chief of the IEEE Transactions on Games and co-founded the IEEE Conference on Games, was VP-Education for the IEEE Computational Intelligence Society and has served in many conference chair roles. His research is focused on simulation-based AI (e.g. Monte Carlo Tree Search, Rolling Horizon Evolution), bandit-based optimisation, and LLMs.